

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : William L. Bowden et al.                      Art Unit :  
Serial No. :    Examiner :  
Filed : March 9, 2004  
Title : PRIMARY LITHIUM ELECTROCHEMICAL CELL

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

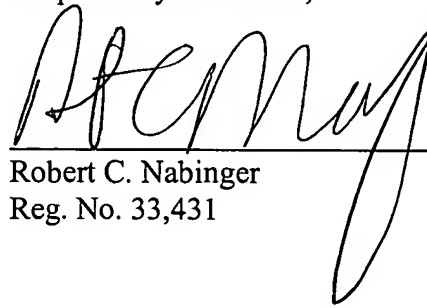
INFORMATION DISCLOSURE STATEMENT

Applicants submit the references listed on the attached form PTO-1449.

Under 35 USC §120, this application relies on the earlier filing date of application serial number 09/988,298, filed on November 19, 2001. The following references were submitted to and/or cited by the Office in the prior application and, therefore, are not provided in this application.

This statement is being filed with the application. Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

  
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Reg. No. 33,431

Date: March 9, 2004

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| Substitute Form PTO-1449<br>(Modified)   | U.S. Department of Commerce<br>Patent and Trademark Office | Attorney's Docket No.<br>08935-251002 | Application No. |
| <b>Information Disclosure Statement<br/>by Applicant</b><br>(Use several sheets if necessary)<br><br>(37 CFR §1.98(b)) |  | Applicant<br>William L. Bowden et al. |                 |
|  |  | Filing Date<br>March 9, 2004          | Group Art Unit  |

| U.S. Patent Documents |           |                 |                  |                        |       |          |                            |
|-----------------------|-----------|-----------------|------------------|------------------------|-------|----------|----------------------------|
| Examiner Initial      | Desig. ID | Document Number | Publication Date | Patentee               | Class | Subclass | Filing Date If Appropriate |
|                       | AA        | 4,133,856       | 01/09/79         | Ikeda <i>et al.</i>    |       |          |                            |
|                       | AB        | 4,246,253       | 01/20/81         | Hunter                 |       |          |                            |
|                       | AC        | 4,312,930       | 01/26/82         | Hunter                 |       |          |                            |
|                       | AD        | 4,604,336       | 08/05/86         | Nardi                  |       |          |                            |
|                       | AE        | 4,904,552       | 02/27/90         | Furukawa <i>et al.</i> |       |          |                            |
|                       | AF        | 4,975,346       | 12/04/90         | Lecerf <i>et al.</i>   |       |          |                            |
|                       | AG        | 5,114,804       | 05/19/92         | Stiles <i>et al.</i>   |       |          |                            |
|                       | AH        | 5,294,499       | 03/15/94         | Furukawa et al.        |       |          |                            |
|                       | AI        | 5,425,932       | 06/20/95         | Tarascon               |       |          |                            |
|                       | AJ        | 5,759,510       | 06/02/98         | Pillai                 |       |          |                            |
|                       | AK        | 5,955,052       | 09/21/99         | Padhi <i>et al.</i>    |       |          |                            |
|                       | AL        | 5,997,839       | 12/07/99         | Pillai                 |       |          |                            |
|                       | AM        | 6,207,129 B1    | 03/27/01         | Padhi <i>et al.</i>    |       |          |                            |

| Other Documents (include Author, Title, Date, and Place of Publication) |           |  |
|---|-----------|--|
| Examiner Initial  | Desig. ID | Document   |
|   | AN        | Ammundsen <i>et al.</i> , "Mechanism of Proton Insertion and Characterization of the Proton Sites in Lithium Manganate Spinels," Chem. Mater., Vol. 7, No. 11, pp. 2151-2160, (1995).  |
|   | AO        | Bowden <i>et al.</i> , "Manganese Dioxide for Alkaline Zinc Batteries: Why Electrolytic MnO <sub>2</sub> ?", ITE Letters on Batteries, New Technologies & Medicine, Vol. 1, No. 6, (2000).   |
|   | AP        | Dahn <i>et al.</i> , "Thermal stability of Li <sub>x</sub> CoO <sub>2</sub> , Li <sub>x</sub> NiO <sub>2</sub> and λ-MnO <sub>2</sub> and consequences for the safety of Li-ion cells," Solid State Ionics, Vol. 69, Nos. 3-4, pp. 265-270, (1994).  |
|   | AQ        | David <i>et al.</i> , "Structure Refinement of the Spinel-Related Phases Li <sub>2</sub> Mn <sub>2</sub> O <sub>4</sub> and Li <sub>0.2</sub> Mn <sub>2</sub> O <sub>4</sub> ," J. Solid State Chem., Vol. 67, pp. 316-323, (1987).  |
|   | AR        | Geronov <i>et al.</i> , "Rechargeable Compact Li Cells with Li <sub>x</sub> Cr <sub>0.9</sub> V <sub>0.1</sub> S <sub>2</sub> and Li <sub>1+x</sub> V <sub>3</sub> O <sub>8</sub> Cathodes and Ether-Based Electrolytes," J. of the Electrochemical Soc., Vol. 137, No. 11, pp. 3338-3344, (90). |
|   | AS        | Giwa <i>et al.</i> , "Lithium Primary Envelope Cells," 16 <sup>th</sup> Intern. Seminar & Exhibition on Primary & Secondary Batteries, pp.Q1-11 (1999).  |
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|   | AU        | Hunter, James C., "Preparation of a New Crystal of Manganese Dioxide: λ-MnO <sub>2</sub> ," Journal of Solid State Chemistry, Vol. 39, pp. 142-147, (1981).  |
|   | AV        | Larcher <i>et al.</i> , "Synthesis of MnO <sub>2</sub> Phases from LiMn <sub>2</sub> O <sub>4</sub> in Aqueous Acidic Media," J. Electrochem. Soc., Vol. 145, No. 10, pp. 3392-3400, (1998).   |

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| Examiner Signature   | Date Considered |
| EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. |                 |

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| Substitute Form PTO-1449<br>(Modified)   | U.S. Department of Commerce<br>Patent and Trademark Office | Attorney's Docket No.<br>08935-251002 | Application No. |
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| Other Documents (include Author, Title, Date, and Place of Publication) |           |   |
|---|-----------|---|
| Examiner Initial  | Desig. ID | Document  |
|   | BA        | Manev, V. <i>et al.</i> , "Rechargeable lithium battery with spinel-related $\lambda$ -MnO <sub>2</sub> 1. Synthesis of $\lambda$ -MnO <sub>2</sub> for battery applications," Journal of Power Sources, 43-44, pp. 551-559, (1993).                  |
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|   | BC        | Patrice <i>et al.</i> , "Understanding the second electron discharge plateau in MnO <sub>2</sub> -based alkaline cells," ITE Letters on batteries, New Technologies and Medicine, Vol. 2, No. 4, (2001).  |
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|   | BE        | Schilling <i>et al.</i> , "Modification of the High-Rate Discharge Behavior of Zn-MnO <sub>2</sub> Alkaline Cells through the Addition of Metal Oxides to the Cathode," ITE Letters on Batteries, New Technologies & Medicine, Vol. 2, No. 3, (2001). |
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|   | BG        | Tarascon <i>et al.</i> , "The Spinal Phase of LiMn <sub>2</sub> O <sub>4</sub> as a Cathode in Secondary Lithium Cells," Electrochem. Soc., Vol. 138, No. 10, pp. 2859-2864, (1991).  |
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